- 7. (Amended)The method according to [one of the preceding claims] <u>claim 1</u>, wherein a graph comparison function is used, which comprises a jet comparison function that takes into account the similarity of the jets corresponding to one another.
- 10. (Amended) The method according to [one of the claims 7 to 9]claim 7, wherein the jet comparison function is defined as a function of single jet comparison functions of jets corresponding to one another.
- 12. (Amended) The method according to claim 10 [or 11], wherein sub-jets of the corresponding jets are taken into account for determining a single jet comparison, and wherein a single jet comparison function is defined as a function of sub-jet comparison functions.
- 14. (Amended) The method according to [one of the claims 7 to 13] <u>claim 7</u>, wherein different node-dependent jet comparison functions and/or single jet comparison functions and/or sub-jet comparison functions are used.
- 15. (Amended) The method according to [one of the claims 7 to 9] claim 7, in combination with claim 2, wherein the bunch jets of the reference bunch graph B^M are divided into sub-bunch jets b_k^M , and the jet comparison function between the sub-bunch jets b_k^M of the reference bunch graph and the corresponding sub-jets j_l ' of the image graph G' for n nodes for m recursions is calculated according to the following formulae:

$$\begin{split} S_{Jet}(B^M,G') &= \sum_n \omega_n S_n(B_n^M,J_n')\,,\, \text{or} \\ S_{Jet}(B^M,G') &= \prod_n \left(S_n(B_n^M,J_n')\right)^{\omega_n}\,,\, \text{wherein} \end{split}$$

 ω_n is a weighting factor for the n-th node n, and the comparison function $S_n(B_n^M, J_n')$ for the n-th node of the reference bunch graph with the n-th node of the image graph is given by:

$$\begin{split} S(B^M,J') &= \Omega\!\!\left(\!\left\{S_{kl}(b_k^M,j_l')\!\right\}\!\right) \!=:\! \Omega(M)\,,\, \text{with} \\ &\Omega^{(0)}(M) = \sum_{l} \omega_{_l} \Omega_{_l}^{(1)}(M_{_l}^{(1)})\,,\, \text{or} \\ &\Omega^{(0)}(M) = \prod_{_l} \left(\Omega_{_l}^{(1)}(M_{_l}^{(1)})\right)^{\omega_{_l}},\, \text{or} \\ &\Omega^{(0)}(M) = \underset{_l}{\text{max}}\!\left\{\omega_{_l} \Omega_{_l}^{(1)}(M_{_l}^{(1)})\right\},\, \text{or} \end{split}$$

$$\Omega^{(0)}(\boldsymbol{M}) = \underset{i}{min} \Big\{ \omega_{_{I}} \Omega_{_{I}}^{(1)}(\boldsymbol{M}_{_{I}}^{(1)}) \Big\} \;, \; \text{wherein} \; \bigcup_{_{I}} \boldsymbol{M}_{_{I}}^{(1)} = \boldsymbol{M}$$

.

$$\Omega_i^{(m-1)}(\boldsymbol{\mathsf{M}}_i^{(m-1)}) = \sum_{j} \omega_{j} \Omega_j^{(m)}(\boldsymbol{\mathsf{M}}_j^{(m)})\,,$$
 or

$$\Omega_{i}^{(m-1)}(M_{i}^{(1)}) = \prod_{j} \left(\Omega_{j}^{(m)}(M_{j}^{(m)})\right)^{\omega_{j}},$$
 or

$$\Omega_{i}^{(m-1)}(M_{i}^{(m-1)}) = \underset{j}{max} \Big\{ \omega_{j}^{(m)}(M_{j}^{(m)}) \Big\} \;, \; or \;$$

$$\Omega_i^{(m-1)}(M_i^{(m-1)}) = \underset{J}{min} \Big\{ \omega_J \Omega_J^{(m)}(M_J^{(m)}) \Big\} \text{ , wherein } \bigcup_J M_j^{(m)} = M_i^{(m-1)} \text{ and with }$$

$$S(b^M,j^\prime) = \sum_n \omega_n S_n(j_n^M,j^\prime)\,,$$
 or

$$S(b^M,j') = \prod_n (S_n(j_n^M,j'))^{\omega_n}$$
 , or

$$S(b^M,j^{\iota}) = \underset{n}{max} \Big\{ \omega_n S_n(j_n^M,j^{\iota}) \Big\} \,, \, \text{or} \,$$

$$S(b^M,j^\prime) = \underset{n}{min} \Big\{ \omega_n S_n(j_n^M,j^\prime) \Big\} \,. \label{eq:solution}$$

- 18. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein, after the recognition of each structure, a step for determining the significance of the recognition is provided.
- 21. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein, in addition, each structure is associated with the reference images corresponding to the reference graphs and/or the reference graphs from the reference bunch graphs for which the values of the graph comparison functions lie within a predetermined range.
- 22. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein the colour information comprises hue values and/or colour saturation values and/or intensity values determined from the reference image data and the image data, respectively.
- 23. (Amended) The method according to [one of the claims 1 to 22] <u>claim 1</u>, wherein the step of providing the reference graphs and the reference bunch graphs, respectively, comprises fetching the reference graphs and the reference bunch graphs from a central and/or decentralized data base.
- 24. (Amended) The method according to [one of the preceding claims] <u>claim 23</u>, wherein a regular grid is used as a net-like structure of the reference graph, the nodes and links of said regular grid defining rectangular meshes.
- 25. (Amended) The method according to [one of the claims 1 to 23] <u>claim 1</u>, wherein an irregular grid is used as a net-like structure of the reference graph, the nodes and links of said irregular grid being adapted to the structure to be recognized.
- 27. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein Gabor filter functions and/or Mallat filter functions are used as class of filter functions for convolution with the reference image data and image data, respectively.